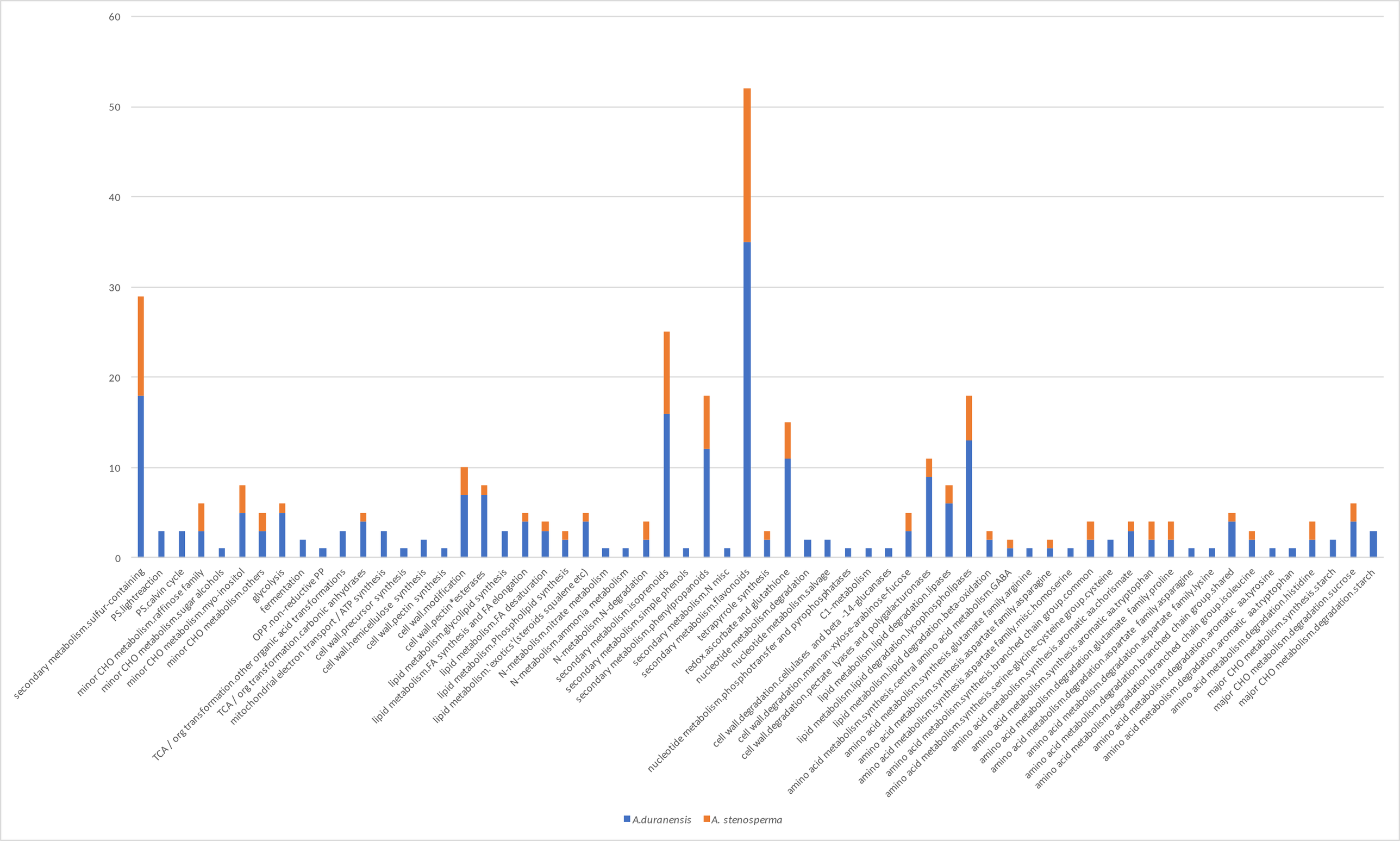
60
50
40
30
20
10
0
secondary metabolism.sulfur-containing
PS.lightreaction
PS.calvin cycle
minor CHO metabolism.raffinose family
minor CHO metabolism.sugar alcohols
minor CHO metabolism.myo-inositol
minor CHO metabolism.others
glycolysis
fermentation
OPP.non-reductive PP
TCA / org transformation.other organic acid transformations
TCA / org transformation.carbonic anhydrases
mitochondrial electron transport / ATP synthesis
cell wall.precursor synthesis
cell wall.hemicellulose synthesis
cell wall.pectin synthesis
cell wall.modification
cell wall.pectin*esterases
lipid metabolism.glycolipid synthesis
lipid metabolism.FA synthesis and FA elongation
lipid metabolism.FA desaturation
lipid metabolism.Phospholipid synthesis
lipid metabolism.'exotics'(steroids squalene etc)
N-metabolism.nitrate metabolism
N-metabolism.ammonia metabolism
N-metabolism.N-degradation
secondary metabolism.isoprenoids
secondary metabolism.simple phenols
secondary metabolism.phenylpropanoids
secondary metabolism.N misc
secondary metabolism.flavonoids
tetrapyrrole synthesis
redox.ascorbate and glutathione
nucleotide metabolism.degradation
nucleotide metabolism.salvage
C1-metabolism
nucleotide metabolism.phosphotransfer and pyrophosphatases
cell wall.degradation.cellulases and beta -14-glucanases
cell wall.degradation.mannan-xylose-arabinose-fucose
cell wall.degradation.pectate lyases and polygalacturonases
lipid metabolism.lipid degradation.lipases
lipid metabolism.lipid degradation.lysophospholipases
lipid metabolism.lipid degradation.beta-oxidation
amino acid metabolism.synthesis.central amino acid metabolism.GABA
amino acid metabolism.synthesis.glutamate family.arginine
amino acid metabolism.synthesis.aspartate family.asparagine
amino acid metabolism.synthesis.aspartate family.misc.homoserine
amino acid metabolism.synthesis.branched chain group.common
amino acid metabolism.synthesis.serine-glycine-cysteine group.cysteine
amino acid metabolism.synthesis.aromatic aa.chorismate
amino acid metabolism.synthesis.aromatic aa.tryptophan
amino acid metabolism.degradation.glutamate family.proline
amino acid metabolism.degradation.aspartate family.asparagine
amino acid metabolism.degradation.aspartate family.lysine
amino acid metabolism.degradation.branched chain group.shared
amino acid metabolism.degradation.branched chain group.isoleucine
amino acid metabolism.degradation.aromatic aa.tyrosine
amino acid metabolism.degradation.aromatic aa.tryptophan
amino acid metabolism.degradation.histidine
major CHO metabolism.degradation.sucrose
major CHO metabolism.degradation.starch
A.duranensis
A. stenosperma